

# Report

10/04/05

## pH sensor:

Sensors from both the companies have been installed. We have started using these sensors today. For 2 hours both the sensors were reading around 8.2 for APS water that is unexpectedly high. I have left them running overnight to confirm the readings.

## Level of DO control in experimental water:

Oxygen sensors have been installed. I am planning to calibrate them tomorrow. We are planning to start trial runs to check the system within a couple of days. If the system works fine, we should be able to start our second phase of experiments next week.

## Isolated water system from APS water:

I will submit our preliminary plan along with a preliminary P&ID diagram tomorrow.

## XRD & rest of the microstructural analysis of the erosion samples:

Technicians have been visiting IIT this week to troubleshoot the XRD machine. I am expecting to perform both the analysis next week.

## Task List:

Following is a status on the list of tasks that need to be completed before we can start our second phase of experiments.

Tasks	Status
Installation of pH sensor system for Endress & Hauser	Completed
Installation of oxygen sensors to control DO in experiment water	Completed
Installation of a flat sample in the system	Completed
Water pressure reduction for the Thornton pH sensors	Completed
Automated data collection	Completion TBD
Plan to separate experimental water from APS water	Completion TBD
Calibration of DO sensors	10-05-05